

ASSOCIATED UNDERWATER SERVICES, INC.

UNDERWATER
CONSTRUCTION
EXPERTS

STARKIST SAMOA INC/ CHICKEN OF THE SEA

***Waste Water Outfall
Inspection & Repairs
January / February 2008***

***ASSOCIATED
UNDERWATER
SERVICES, INC.***

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This report documents the underwater inspection and subsequent repairs made to the Star-Kist/Chicken of the Sea waste water outfall during January/February 2008.

Inspection: On January 24, 2008, AUS conducted an underwater video inspection of the Star-Kist/COS waste water outfall. The inspection began at property line between Star-Kist and COS. Locations given in this report are approximate distances and are reference from the western end (Starkist side) of the dock. We were unable to establish station marks on the dock because we did not have access to COS property.

The outfall the western end of the COS dock is 12" HDPE and is fastened to the pile cap by stainless steel pipe clamps which are anchor bolted into the concrete cap. At the offshore row of piles the outfall takes a 90 degree turn down. We observed 3 stainless steel pipe to pile brackets that were corroded to the point of failure at this location. At the bottom of the pile the outfall turns 90 degrees offshore and in line with the first row of piles running east/west. From this point going offshore the outfall runs between the first and second row of piles. Immediately offshore of the 90 degree turn there is transition/increasing spool piece with flanges on both ends. This piece makes the transition between 12-16 inch diameter outfall sections. We observed that the flange on the offshore end of this piece was leaking.

Working offshore we observed that numerous 5x5 ft fish tote boxes are lying around and on top of the outfall. These boxes are shattered throughout the length of the COS dock. At approximately 1/3 distance from the west end of the dock we observed the 8" tie in line that comes from the COS plant. We followed this pipe up into the shoreline riprap. The pipe is in good condition with no visible damage.

At approximately 2/3 distance from the west end of the dock we observed a 30" stainless steel pipe clamp on the outfall. While the clamp was in good condition we did observe a small leak at the bottom (6 o'clock position) of the clamp. Six feet offshore of this clamp we observed a six inch diameter tie in connection flange that had been blanked off. A large leak was observed coming from blind flange gasket. It appeared that the blind flange bolts had corroded and loosed the blind flange.

Also at this location we observed significant deterioration of the anchor block thru-bolts. The outfall anchor blocks are two piece pyramid shaped ballast block that are held together by (1) galvanized 1" center bolt and (2) plastic 3/4" side bolts. The galvanized center bolt on all the anchor block we observed were corroded to the point of failure.

At the east end of the dock we observed another 30" long stainless steel pipe clamp which was connected to chain come-a-long that was in turn connected to a rope tied to a culvert. The clamp was not leaking but its edges were covered by underwater (splash zone) epoxy.

Repairs:

Saturday January 26, 2008:

The leak at increaser spool piece. The bolts on the offshore flange were loose. We tightened the bolts and the leak stopped. We removed pipe to pile brackets from pile on west end of dock so that they could be repaired by Starkist.

The Leak at 6" tie -in with blind flange: We removed this piece, installed new gasket and stainless steel bolts and re-install. Leak was stopped. See Photo 1.

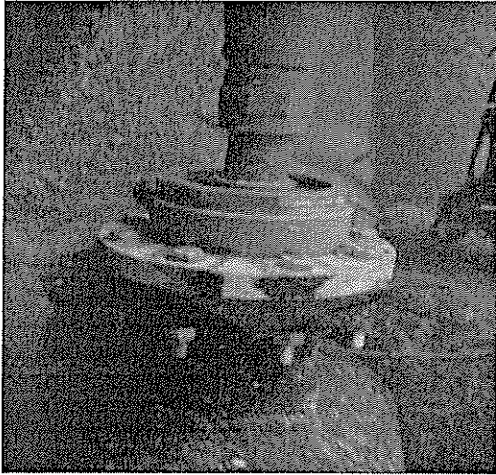


Photo 1: 6" tie-in connection with new gasket and bolts

Friday 2/1/08:

Reinstalled pipe to pile brackets on west end of dock

Saturday 2/2/08: Cut out existing 30" long stainless steel clamp at 2/3 point location on dock. We installed new 60" piece of HDPE pipe. Installed two 30" long stainless steel clamps

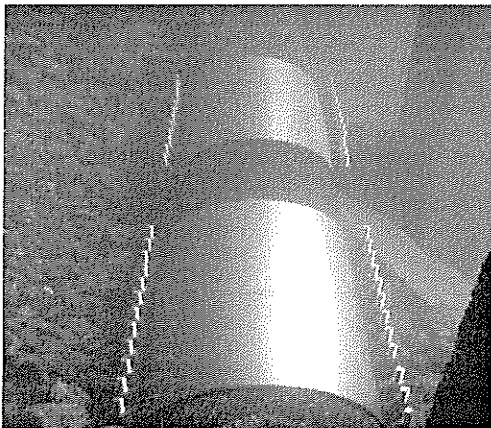


Photo 2: New 60" spool piece with (2) new stainless 30" long pipe clamps 2/3 from west end of CCS dock

Saturday 2/9/08:

Cut out existing 30" pile clamp at the east end of dock. Removed attached come-a-long. Installed new 60" piece of HDPE pipe. Installed (2) new 30" stainless pipe clamp on either end of new spool piece.

Underwater video was taken of all the leak and repairs that are described in the report

Respectfully submitted,

David Cleary